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resistance of the test structure comprises a circuit simulation.

- [c12] The method of claim 1 wherein the step of determining the critical breakdown resistance of the test structure comprises a circuit simulation.
- [c13] The method of claim 12 wherein the step of repetitively determining the operating resistance comprises determining the operating resistance after a significant change is detected in at least one electrical property.
- [c14] The method of claim 13 wherein the electrical property comprises current or voltage.
- [c15] The method of claim 13 further comprises repetitively determining the operating resistance after a time interval.
- [c16] The method of claim 15 wherein the time interval is predefined according to a stress duration.
- [c17] The method of claim 16 further comprising determining a maximum current after breakdown.
- [c18] The method of claim 1 wherein the step of repetitively determining the operating resistance comprises repetitively determining the operating resistance after a significant change is detected in at least one electrical property.
- [c19] The method of claim 18 wherein the electrical property comprises current or voltage.
- [c20] The method of claim 19 further comprises repetitively determining the operating resistance after a time interval.
- [c21] The method of claim 1 wherein the step of repetitively determining the operating resistance comprises repetitively determining the operating resistance after a time interval.
- [c22] The method of claim 21 wherein the time interval is predefined according to a stress duration.
- [c23] The method of claim 21 further comprising determining a maximum current

after breakdown.

- [c24] The method of claim 1 further comprising determining a maximum current after breakdown.
- [c25] The method of claim 1 further comprising computing a reliability of the test structure from the critical breakdown time.
- [c26] The method of claim 25 wherein the step of determining the critical breakdown resistance comprises determining the critical breakdown resistance in a circuit environment under normal operating conditions.
- [c27] The method of claim 26 wherein the step of determining the critical breakdown resistance of the test structure comprises a circuit simulation.
- [c28] The method of claim 27 wherein the step of repetitively determining the operating resistance comprises repetitively determining the operating resistance after a significant change is detected in at least one electrical property.
- [c29] The method of claim 28 wherein the electrical property comprises current or voltage.
- [c30] The method of claim 28 further comprises repetitively determining the operating resistance after a time interval.